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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,379	04/06/2005	Guofu Zhou	NL 021000	4907
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BRIARCLIFF MANOR, NY 10510				
EXAMINER				
CHOWDHURY, AFROZA Y				
ART UNIT		PAPER NUMBER		
2629				
MAIL DATE		DELIVERY MODE		
03/05/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/530,379

Applicant(s)

ZHOU ET AL.

Examiner

AFROZA Y. CHOWDHURY

Art Unit

2629

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 6, 8, 9, 13, 15, 16 and 20-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 3, 6, 8, 9, 13, 15, 16 and 20-22 is/are allowed.
- 6) ☒ Claim(s) 23-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's request for continued examination (RCE) filed on **January 20, 2010** has been entered. Claims 1, 3, 6, 8, 9, 13, 15, 16, and 20-26 are currently pending. Claims 1, 3, 6, 8, 9, 13, 15, 16, and 20-22 are allowed and claims 23-26 are new. Applicant's newly added claims are addressed herein below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Webber** (US Pub. 2002/0180687).

As to claim 23, Webber discloses an electrophoretic display panel for displaying a picture and a subsequent picture comprising:

a first substrate (fig. 1A(114)) and a second opposed substrate (fig. 1A, Note: It is inherent for an electrophoretic display to have two substrates opposed to each other);

an electrophoretic medium between the substrates (fig. 1A(102), [0036]);

a plurality of pixels ([0036], Note: It is inherent for the display to have a plurality of pixels);

a first electrode (fig. 1A(110), [0036], front electrode) and a second electrode (fig. 1A(112), [0036], rear electrode) associated with each pixel for receiving a potential difference; and

a driver means for controlling the potential differences between the electrodes for each pixel of the plurality of pixels ([0039]);

the electrophoretic medium (fig. 1A, 1B, [0036]) being able to provide each pixel with an appearance, being one of a first (fig. 9, [0039], white) and a second (fig. 9, [0039], black) extreme appearance and intermediate appearances (fig. 9, [0089], gray) between the first and the second extreme appearance ([0089]), and

the driver means ([0039]) for each pixel of the plurality of pixels, the potential difference to provide:

- a picture value to provide the pixels with a respective picture appearance being one of the appearances in dependence of the picture to be displayed (fig. 9, [0039] – [0040], white, gray, black), subsequently
- one or more inter-picture values ([0052]) to provide the pixels with a respective inter-picture appearances (fig. 9, [0040], gray), and subsequently,
- a subsequent picture value ([0052]) to provide the pixels with a respective subsequent picture appearance being one of the appearances (fig. 9, [0039] – [0040], white, gray, black) in dependence of the subsequent picture to be displayed,

the driver means ([0039]) controls for each pixel of the plurality of pixels an estimate potential difference as an inter-picture value ([0052]) so that a respective inter-

picture is an estimate of the respective subsequent picture appearance (fig. 9, [0040], gray).

Webber does not explicitly teach a driver means reduces the visibility of the one or more respective inter-picture appearances.

However, it is obvious for the driver means of Webber's electrophoretic display panel to be capable of reducing the visibility of the one or more respective inter-picture appearances in order to provide smooth transition of subsequent pictures (as best understood). This also can be very well a byproduct of the driving by simply applying the proper driving signal to the display, since the claim is not reciting how this reducing of the visibility occurs.

As to claim 24, Webber teaches a display panel wherein the estimate picture appearance of each pixel of the plurality of pixels is substantially equal to: the first extreme appearance if the respective subsequent picture appearance is optically closer to the first extreme appearance than to the second extreme appearance, and the second extreme appearance if the respective subsequent picture appearance is optically closer to the second extreme appearance than to the first extreme appearance ([0039]).

As to claim 25, Webber teaches a display panel wherein the drive means control, for each pixel of the plurality of pixels, the potential difference for displaying the subsequent picture with a sequence of preset values, the preset values in the sequence

alternating in sign and having an absolute value in the order of the subsequent picture value, and the drive means applies each preset value in the sequence for a duration being at least a factor of two smaller than a largest duration of the durations during which the subsequent picture values will be applied, before having the subsequent picture value ([0052]).

As to claim 26, Webber teaches a display panel wherein the sequence of preset values has a last preset value with sign equal to the sign of the subsequent picture value ([0039]).

Allowable Subject Matter

4. Claims 1, 3, 6, 8, 9, 13, 15, 16, and 20-22 are allowed.
5. The following is an examiner's statement of reasons for allowance:

As argued by the Applicants on the 3rd page of Remarks, dated **October 20, 2009**, prior art does not teach **"a plurality of pulses alternating in sign and having the initial value, wherein a first pulse of the plurality of pulses has a same sign as the initial sign, and a last pulse of the plurality of pulses has a final sign which is opposite the initial sign, each pulse of the plurality of pulses having a pulse duration which is less then the first duration, and a final pulse having the final sign and a final duration larger than the pulse duration"** in combination with other limitations of claims 1, 6, and 13.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

6. Applicant's arguments with respect to claims 23-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AFROZA Y. CHOWDHURY whose telephone number is (571)270-1543. The examiner can normally be reached on 7:30-5:00 EST, 5/4/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AC
2/25/2010

/Amr Awad/
Supervisory Patent Examiner, Art Unit 2629